ABSTRACT

An axially minimized spindle motor is provided that meets industry demands for low profile disc drive memory systems including stiffness, vibration and acoustic demands. Axial height of a base plate is reduced by forming a composite component of the stator and base plate. A thermally conductive bonding substance unites the stator and base plate, and fills in at least a portion of open space adjacent the base plate and stator. By making such a composite component, the axial thickness of the base plate may be reduced. In an aspect, a base plate is provided having an axial height adjacent to a stator in the range of 0.1 mm to 0.3 mm with improved stiffness, reduced vibration and reduced acoustics as compared to conventional low profile disc drive designs.